

IN THE CLAIMS:

Each claim that remains pending and under consideration in the above-referenced application is reproduced below, including any amendments thereto. The ensuing listing of the claims replaces all prior claims listings.

1. (Currently amended) A method for fabricating a field emission structure, comprising:
forming a dielectric layer at least partially around at least one emitter tip;
forming a mask comprising a material which is removable with selectivity over a material of ~~said~~ the dielectric layer, at least one aperture of ~~said~~ the mask being located substantially over ~~said~~ the at least one emitter tip;
removing portions of ~~said~~ the dielectric layer that are laterally adjacent to ~~said~~ the at least one emitter tip through ~~said~~ the at least one aperture;
removing ~~said~~ the mask;
forming another dielectric layer adjacent to ~~said~~ the dielectric layer;
forming a conductive or semiconductive layer adjacent to ~~said~~ the another dielectric layer; and
exposing ~~said~~ the at least one emitter tip through ~~said~~ the another dielectric layer and ~~said~~ the conductive or semiconductive layer.

2. (Currently amended) The method of claim 1, wherein ~~said~~ forming ~~said~~ the dielectric layer comprises forming ~~said~~ the dielectric layer to have a thickness which is less than a height of ~~said~~ the at least one emitter tip.

3. (Currently amended) The method of claim 1, wherein ~~said~~ forming ~~said~~ the mask comprises forming ~~said~~ the mask from at least one of chromium, polysilicon, and molybdenum.

4. (Currently amended) The method of claim 1, wherein ~~said~~ forming ~~said~~ the mask comprises:
depositing a layer comprising mask material; and
planarizing ~~said~~ the mask material.

5. (Currently amended) The method of claim 4, wherein ~~said~~ planarizing comprises removing at least a portion of at least one electrically conductive defect that extends through ~~said~~ the dielectric layer and into ~~said~~ the layer comprising mask material.

6. (Currently amended) The method of claim 1, wherein ~~said~~ removing portions of ~~said~~ the dielectric layer comprises exposing ~~said~~ the portions to at least one etchant.

7. (Currently amended) The method of claim 1, wherein ~~said~~ forming ~~said~~ the another dielectric layer comprises forming ~~said~~ the another dielectric layer to have a surface which is substantially coplanar with an apex of ~~said~~ the at least one emitter tip.

8. (Currently amended) The method of claim 1, wherein ~~said~~ forming ~~said~~ the another dielectric layer comprises covering at least one electrically conductive defect that extends through ~~said~~ the dielectric layer.

9. (Currently amended) The method of claim 1, wherein ~~said~~ exposing comprises: forming at least one aperture through ~~said~~ the conductive or semiconductive layer in alignment with ~~said~~ the at least one emitter tip; and removing portions of ~~said~~ the another dielectric layer that are laterally adjacent to ~~said~~ the at least one emitter tip through ~~said~~ the at least one aperture.

10. (Currently amended) The method of claim 9, wherein ~~said~~ forming ~~said~~ the at least one aperture comprises planarizing ~~said~~ the conductive or semiconductive layer.

11. (Currently amended) The method of claim 9, wherein ~~said~~ removing portions of ~~said~~ the another dielectric layer comprises exposing ~~said~~ the portions to at least one etchant.

12. (Currently amended) The method of claim 9, wherein ~~said~~ removing portions of ~~said the~~ another dielectric layer is effected without substantially removing remaining portions of ~~said the~~ conductive or semiconductive layer.